

US EPA RECORDS CENTER REGION 5



466398

Monthly Oversight Report 50
ACS NPL Site
Griffith, Indiana
February 5 - March 4, 2005



BLACK & VEATCH

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Black & Veatch Special Projects Corp.

USEPA/RAC VII
American Chemical Services RAO (057-ROBF-05J7)

BVSPC Project 46526
BVSPC File C.3
March 9, 2005

Mr. Kevin Adler
U.S. Environmental Protection Agency
77 W. Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

Subject: Monthly Oversight Summary Report
No. 50 for February 2005

Dear Mr. Adler:

Enclosed is the Monthly Oversight Summary Report No. 50 for February 2005 for the American Chemical Services Superfund Site in Griffith, Indiana.

If you have any questions, please call (312-683-7856) or email (campbelllm@bv.com).

Sincerely,

BLACK & VEATCH Special Projects Corp.

Larry M. Campbell, P.E.
Site Manager

Enclosure

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Monthly Oversight Summary Report No. 50
ACS Superfund Site WA57, 46526.238

Reporting Period: Month of February (February 5 - March 4, 2005)

BVSPC O/S Dates: February 24 & March 4, 2005

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Boart Longyear	1	Soil Vapor Sampling Driller
Fliteway Technologies	1	Potential Blower Baffle Contractor
Griffith Fire Department	1	Chief of Fire Department
Austgen	1	General Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant, the in-situ soil vapor extraction systems, and the air sparge systems.
- Montgomery Watson Harza completed installing fencing around soil vapor extraction wells in the Still Bottoms Pond Area.
- Montgomery Watson Harza pumped product from five Still Bottoms Pond Area wells.
- Montgomery Watson Harza provided briefing to the Chief of the Griffith Fire Department.
- Montgomery Watson Harza collected soil gas samples from near the house at 1002 Reder Road.
- Microbac (formerly Simalabs) collected samples from the groundwater treatment plant for routine process monitoring.
- Montgomery Watson Harza held an operation, maintenance, and monitoring meeting at its Chicago office on March 4, 2005.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 27 gpm. MWH reported that water was pumped to the GWTP from all available sources. Microbac (formerly Simalabs) collected samples from the GWTP for routine process monitoring.

MWH reported that it had removed the failed gearbox that rotates the rake in the biotank clarifier and shipped it to the manufacture for repair. MWH will reinstall it promptly following its receipt onsite. The GWTP continues to operate without the clarifier rake rotating.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1), and those from the OFCA ISVE system were processed through thermox 2. MWH reported that the pH probes in both thermox 1 and 2 stopped working during the week of February 14. They were replaced and operations continued. MWH reported that thermox 1 and 2 were operational, respectively, 93% and 100% of the days in February.

MWH reported that it was pulling vapors from 25 OFCA ISVE wells and that the two OFCA blowers are currently pumping vapors back to thermox 2, with minimal dilution air (valve is one stop from being fully closed). MWH reported that it was now pulling vapors from 22 ONCA SBPA ISVE wells. Limited to no flow has been observed in 6 of the original 14 activated wells. This system operated with zero ambient air, pumping vapors back to thermox 1. MWH reported that it replaced the demisters in the knockout tanks in both the SBPA and OFCA blower sheds, and replaced the SBPA condensate pump.

MWH reported that the mass removal rate in both SBPA and OFCA ISVE systems have decreased substantially in the last 2 months. MWH will evaluate if additional wells should be added.

MWH reported that Global Technologies will perform a complete field inspection of thermox 2 in late April.

MWH reported during the January reporting period that odors had been reported in the ACS break room located on the ONCA SBPA cap. MWH has since operated the SBPA air sparge system using only four of the six ONCA SBPA air sparge points AS3, AS4, AS5, and AS6, located at distance from the break room. ACS has not reported additional recurrence of odors in the break room.

MWH reported that it completed filling the fence stanchions with concrete during the week of February 7 and subsequently installed chain fencing around all ONCA SBPA ISVE wells and the SBPA blower sheds.

MWH pumped 15 gallons of product from five SBPA ISVE wells SVE52, SVE53, SVE62, SVE72, and SVE88 on February 24.

MWH reported that on February 28, it submitted a *Traffic Control Plan* to the town of Griffith describing the temporary closure of lanes of Colfax Avenue during chemox injection activities.

MWH reported that it collected 10 soil gas samples (plus a duplicate and an equipment blank samples) from 5 locations west of the house at 1002 Reder Road on March 1 and 2.

MWH reported that the Chief of the Griffith Voluntary Fire Department was onsite March 2 for a briefing and orientation of activities associated with the GWTP and other remedial operations at the site. MWH

provided the Chief with a complete set of all material safety data sheets (MSDS) for chemicals used onsite. MWH scheduled a similar briefing and orientation for the entire Griffith Voluntary Fire Department at the site on Tuesday March 22 at 6 pm.

MWH reported that Fliteway Technologies visited the site on March 3 to measure the blower locations in order to prepare a proposal to provide housing or baffling of these blowers to minimize ambient noise.

MWH conducted an operation, maintenance, and monitoring (OM&M) meeting at its Chicago office on March 4. Black & Veatch Special Projects Corp. (BVSPC) attended this meeting.

Attached are BVSPC weekly reports No. 206 through 209, correspondence, log book notes, and photographs of the daily activities. BVSPC's crew conducted oversight of the major field activities on February 24. BVSPC's crew attended the OM&M meeting on March 4.

Topics of Concern: None

Concern Resolution: None

Upcoming Activities:

- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE and air sparge systems.
- MWH to monitor odors in the ACS break room.
- MWH to assess results of additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.
- MWH to conduct second full-scale chemical oxidation injection application in March.
- MWH to conduct first-quarter groundwater sampling event in March.
- MWH to conduct briefing for Griffith Volunteer Fire Department on March 22.
- MWH to assess methods to reduce noise from GWTP blowers.

Signature: Larry Campbell

Date: March 9, 2005

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Weekly Oversight Summary Report No. 206
ACS Superfund Site WA57, 46526.238

Reporting Period: Week of February 7, 2005

BVSPC O/S Dates: Cancelled because of limited site activities.

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	1	Respondent's General Contractor
Austgen	1	General Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant, the in-situ soil vapor extraction systems, and the air sparge systems.
- Montgomery Watson Harza completed installing fencing around soil vapor extraction wells in the Still Bottoms Pond Area.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 27 gpm. MWH reported that water was pumped to the GWTP from all available sources.

MWH reported that the failed gearbox that rotates the rake in the biotank clarifier was still being repaired by the manufacturer; MWH will install it promptly following its receipt onsite. The GWTP continues to operate without the clarifier rake rotating.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1), and those from the OFCA ISVE system were processed through thermox 2.

MWH reported that it was pulling vapors from 25 OFCA ISVE wells and that the two OFCA blowers are currently pumping vapors back to thermox 2 with minimal dilution air (valve is one stop from being fully closed). MWH reported that it was now pulling vapors from 22 ONCA SBPA ISVE wells. Limited to no flow has been observed in 6 of the original 14 activated wells. This system operated with zero ambient air, pumping vapors back to thermox 1.

MWH reported during the January reporting period that odors had been reported in the ACS break room located on the ONCA SBPA cap. MWH has since operated the SBPA air sparge system using only four

of the six ONCA SBPA air sparge points AS3, AS4, AS5, and AS6, located at distance from the break room. ACS has not reported additional recurrence of odors in the break room.

MWH reported that it completed filling the fence stanchions with concrete during the week and subsequently installed chain fencing around all ONCA SBPA ISVE wells and the SBPA blower sheds.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE and air sparge systems.
- MWH to monitor odors in the ACS break room.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.
- MWH to conduct second full-scale chemical oxidation injection application in March.
- MWH to conduct first-quarter groundwater sampling event in March.
- MWH to assess methods to reduce noise from GWTP blowers.

Signature: Larry Campbell

Date: February 15, 2005

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Weekly Oversight Summary Report No. 207
ACS Superfund Site WA57, 46526.238

Reporting Period: Week of February 14, 2005

BVSPC O/S Dates: Cancelled because of limited site activities.

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	1	Respondent's General Contractor
Austgen	1	General Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant, the in-situ soil vapor extraction systems, and the air sparge systems.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 27 gpm. MWH reported that water was pumped to the GWTP from all available sources.

MWH reported that the failed gearbox that rotates the rake in the biotank clarifier was still being repaired by the manufacturer; MWH will install it promptly following its receipt onsite. The GWTP continues to operate without the clarifier rake rotating.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1), and those from the OFCA ISVE system were processed through thermox 2.

MWH reported that it was pulling vapors from 25 OFCA ISVE wells and that the two OFCA blowers are currently pumping vapors back to thermox 2 with minimal dilution air (valve is one stop from being fully closed). MWH reported that it was now pulling vapors from 22 ONCA SBPA ISVE wells. Limited to no flow has been observed in 6 of the original 14 activated wells. This system operated with zero ambient air, pumping vapors back to thermox 1. MWH reported that the pH probes in both thermox 1 and 2 stopped working this week. They were replaced and operations continued.

MWH reported during the January reporting period that odors had been reported in the ACS break room located on the ONCA SBPA cap. MWH has since operated the SBPA air sparge system using only four

of the six ONCA SBPA air sparge points AS3, AS4, AS5, and AS6, located at distance from the break room. ACS has not reported additional recurrence of odors in the break room.

MWH reported that it was preparing to pump product from five SBPA ISVE wells.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE and air sparge systems.
- MWH to monitor odors in the ACS break room.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.
- MWH to conduct second full-scale chemical oxidation injection application in March.
- MWH to conduct first-quarter groundwater sampling event in March.
- MWH to assess methods to reduce noise from GWTP blowers.

Signature: Larry Campbell

Date: February 23, 2005

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Weekly Oversight Summary Report No. 208
ACS Superfund Site WA57, 46526.238

Reporting Period: Week of February 21, 2005

BVSPC O/S Dates: February 24, 2005 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	1	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant, the in-situ soil vapor extraction systems, and the air sparge systems.
- Montgomery Watson Harza pumped product from five Still Bottoms Pond Area wells.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 27 gpm. MWH reported that water was pumped to the GWTP from all available sources.

MWH reported that the failed gearbox that rotates the rake in the biotank clarifier was still being repaired by the manufacturer; MWH will install it promptly following its receipt onsite. The GWTP continues to operate without the clarifier rake rotating.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1), and those from the OFCA ISVE system were processed through thermox 2.

MWH reported that it was pulling vapors from 25 OFCA ISVE wells and that the two OFCA blowers are currently pumping vapors back to thermox 2 with minimal dilution air (valve is one stop from being fully closed). MWH reported that it was now pulling vapors from 22 ONCA SBPA ISVE wells. Limited to no flow has been observed in 6 of the original 14 activated wells. This system operated with zero ambient air, pumping vapors back to thermox 1.

MWH pumped 15 gallons of product from five SBPA ISVE wells SVE52, SVE53, SVE62, SVE72, and SVE88 on February 24.

MWH reported during the January reporting period that odors had been reported in the ACS break room located on the ONCA SBPA cap. MWH has since operated the SBPA air sparge system using only four of the six ONCA SBPA air sparge points AS3, AS4, AS5, and AS6, located at distance from the break room. ACS has not reported additional recurrence of odors in the break room.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE and air sparge systems.
- MWH to monitor odors in the ACS break room.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.
- MWH to conduct second full-scale chemical oxidation injection application in March.
- MWH to conduct first-quarter groundwater sampling event in March.
- MWH to assess methods to reduce noise from GWTP blowers.

Signature: Larry Campbell

Date: March 2, 2005

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Weekly Oversight Summary Report No. 209
ACS Superfund Site WA57, 46526.238

Reporting Period: Week of February 28, 2005

BVSPC O/S Dates: March 4, 2005 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Boart Longyear	1	Soil Vapor Sampling Driller
Fliteway Technologies	1	Potential Blower Baffle Contractor
Griffith Fire Department	1	Chief of Fire Department
Austgen	1	General Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant, the in-situ soil vapor extraction systems, and the air sparge systems.
- Montgomery Watson Harza provided briefing to the Chief of the Griffith Fire Department.
- Montgomery Watson Harza collected soil gas samples from near the house at 1002 Reder Road.
- Montgomery Watson Harza conducted an operation, maintenance, and monitoring meeting at its Chicago office on March 4.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 27 gpm. MWH reported that water was pumped to the GWTP from all available sources.

MWH reported that the failed gearbox that rotates the rake in the biotank clarifier was still being repaired by the manufacturer; MWH will install it promptly following its receipt onsite. The GWTP continues to operate without the clarifier rake rotating.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through

thermal oxidizer 1 (thermox 1), and those from the OFCA ISVE system were processed through thermox 2.

MWH reported that it was pulling vapors from 25 OFCA ISVE wells and that the two OFCA blowers are currently pumping vapors back to thermox 2 with minimal dilution air (valve is one stop from being fully closed). MWH reported that it was now pulling vapors from 22 ONCA SBPA ISVE wells. Limited to no flow has been observed in 6 of the original 14 activated wells. This system operated with zero ambient air, pumping vapors back to thermox 1.

MWH reported that the mass removal rate in both SBPA and OFCA ISVE systems have decreased substantially in the last 2 months. MWH will evaluate if additional wells should be added.

MWH reported that it replaced the demisters in the knockout tanks in both the SBPA and OFCA blower sheds, and replaced the SBPA condensate pump.

MWH reported that Global Technologies will perform a complete field inspection of thermox 2 in late April.

MWH reported during the January reporting period that odors had been reported in the ACS break room located on the ONCA SBPA cap. MWH has since operated the SBPA air sparge system using only four of the six ONCA SBPA air sparge points AS3, AS4, AS5, and AS6, located at distance from the break room. ACS has not reported additional recurrence of odors in the break room.

MWH reported that on February 28, it submitted a *Traffic Control Plan* to the town of Griffith describing the temporary closure of lanes of Colfax Avenue during chemox injection activities.

MWH reported that it collected 10 soil gas samples (plus a duplicate and an equipment blank samples) from 5 locations west of the house at 1002 Reder Road on March 1 and 2.

MWH reported that the Chief of the Griffith Voluntary Fire Department was onsite March 2 for a briefing and orientation of activities associated with the GWTP and other remedial operations at the site. MWH provided the Chief with a complete set of all material safety data sheets (MSDS) for chemicals used onsite. MWH scheduled a similar briefing and orientation for the entire Griffith Voluntary Fire Department at the site on Tuesday March 22 at 6 pm.

MWH reported that Fliteway Technologies visited the site on March 3 to measure the blower locations in order to prepare a proposal to provide housing or baffling of these blowers to minimize ambient noise.

MWH conducted an operation, maintenance, and monitoring (OM&M) meeting at its Chicago office on March 4. Black & Veatch Special Projects Corp. (BVSPC) attended this meeting.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE and air sparge systems.
- MWH to monitor odors in the ACS break room.
- MWH to assess results of additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.
- MWH to conduct second full-scale chemical oxidation injection application in March.
- MWH to conduct first-quarter groundwater sampling event in March.
- MWH to conduct briefing for Griffith Volunteer Fire Department on March 22.
- MWH to assess methods to reduce noise from GWTP blowers.

Signature: Larry Campbell

Date: March 8, 2005

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**ACS STATUS MEETING MINUTES
FOR MARCH 4, 2005 MEETING
AMERICAN CHEMICAL SERVICE, NPL SITE
GRIFFITH, INDIANA**

MEETING DATE: Friday, March 4, 2005

MEETING TIME: 10:00

MEETING LOCATION: MWH Chicago Office

ATTENDEES: Larry Campbell – Black & Veatch
Rob Adams – MWH
Chris Daly – MWH
Lee Orosz – MWH (via telephone)
Chad Smith – MWH (via telephone)
Matthew Mesarch – MWH

TOPICS:

SITE STATUS

Health and Safety Summary

There have been no health and safety issues since the last meeting on February 4th. Lee Orosz contacted the Griffith Fire Department to schedule an inspection of the groundwater treatment plant (GWTP). The intent of the inspection was to aid the fire department in case they need to respond to an emergency at the GWTP. The Griffith Fire Chief was on site on March 2nd to inspect the facility. At the request of the fire chief, a copy of the facility's MSDS book was provided to the fire department. MWH will also coordinate a meeting with the fire department staff. A site visit is scheduled with the approximately 30-person fire department crew on March 27th at 6:00 pm. MWH will give the crew a tour of the facility and show them the locations of chemical storage and confined spaces. 22 and

The gearboxes and motor on top of the activated sludge plant are scheduled to re-placed in March. MWH has already discussed health and safety procedures with the subcontractor. The activated sludge plant is capable of being operated without the motor which operates the sludge rake and has remained operational in the interim.

Groundwater Treatment Plant (GWTP) Status

The GWTP averaged 27 gallons per minute (gpm) in February. The effluent analytical data for January or February (February data has yet to be validated) showed that the GWTP operated in compliance with the discharge standards for the plant.

According to the last few monitoring events, water levels in PZ-116 in the Off-Site Area were apparently rising. MWH will evaluate the water levels and pump condition at and around EW-12 and EW-13.

Off-Site Area/SBPA ISVE Systems

MWH performed routine maintenance on the knockout tank in the SBPA ISVE system building. The demister element was replaced in both the SBPA and Off-Site ISVE knockout tanks. The condensate pump for the SBPA ISVE system was repaired during February. The level controller in the SBPA knockout tank has not been operating properly and will be repaired or replaced. In the meantime, the condensate pump will be operated in manual mode. MWH personnel will regularly check the level in the tank and activate the pump to remove any condensate.

The mass removal rate for both systems have decreased in the past two months. During March, MWH will ensure that the ambient valve is closed and will look at the monitoring data to determine if the active well set can be adjusted to increase mass removal.

Product removal activities occurred at five ISVE well locations in the SBPA.

MWH has contracted Global Technologies to perform an inspection of Thermal Oxidizer 2 (TOX2). They will perform a 75-point inspection of the unit. The event is scheduled for the week of April 25th and the system is expected to be out of operation for two days during the inspection. Thermal Oxidizer 1 (TOX1) was subject to inspection when unit modifications that were performed throughout 2004. The interior of TOX1 will need to be inspected to examine the condition of the coating that was applied. The frequency and schedule for future oxidizer inspections will be included in the final version of the ISVE Systems O&M Manual.

The Off-Site and SBPA air sparge systems were operational during February. Air sparge wells AS-2, AS-3, and AS-5 were operational until January 20th when the system was shut down in response to the vapors noted in the ACS break room which is located just north of the SBPA ISVE area. When the system was restarted, wells AS-3, AS-4, AS-5, and AS-6 were operational. Two sparge wells, those located closest to the breakroom, AS-1 and AS-2, will not be operated until a means to prevent migration of vapors into the ACS breakroom is implemented.

Interaction with Community

Fliteway Technologies was on site in February to measure for housing for the blowers at the GWTP. The housing will be designed to suppress noise from the blowers.

Miscellaneous

The ACS facility will be making modifications to the plant to allow for the addition of a new product. At the time of this meeting, MWH had no further information as to the nature of the new product. MWH will work with the PRP group to find out if more information is available regarding the chemicals that will be used in the new process.

Lower Aquifer Investigation

The Lower Aquifer Investigation Report is scheduled to be submitted on March 25th.

Chemical Oxidation Treatment

ISOTEC is scheduled to mobilize to the site on March 14th. PSA will be on site on March 15th to begin drilling activities. Because the catalyst does not remain in solution at lower temperatures, ISOTEC will utilize a tent and portable heaters to ensure that the solution stays warm. The injection will proceed from the east side of the yard at the corner of Colfax and Reder Roads westward. A Kickoff Safety Meeting will be conducted on March 14th or March 15th. MWH will notify the Agencies and Black & Veatch when the date and time for this meeting has been finalized.

A Traffic Control Plan was submitted for review to the town of Griffith on February 28th. A copy of the document will be forwarded to Black & Veatch and the Agencies.

MWH distributed a document to businesses and residences in the area to inform them of the scheduled activities and plans for closure of one lane of traffic. A copy of this document will be forwarded to the Agencies and Black & Veatch.

Additional soil vapor sampling was conducted near the house on March 1st and 2nd. Results are expected in two to three weeks.

LOOK AHEAD

Field Events

- ISVE Monitoring – March 9 (tentative)
- Second full-scale chem-ox application - March 14 through mid-April
- Groundwater sampling event - March 21 through March 29
- Griffith Fire Department site visit – March 27, 6 pm

Reports

- Monthly Status Report – March 9
- Quarterly Report, 4th Quarter 2004 – March 31
- Quarterly Report, 2nd Quarter 2004 – Agency approval received; final version issued by March 11
- HASP Update – March TBD
- SBPA ISVE System Upgrades Design – March 25
- SBPA Cover CCR – Comments received; RTCs will be submitted on March 18
- ISVE Systems O&M Manual – Comments received; final version issued by March 25
- Lower Aquifer Investigation Report – March 25

Health & Safety Look Ahead

- The motor and gearboxes on the activated sludge plant will be reinstalled in March. The subcontractor has developed a safe method for the installation.
- The portable heaters used to warm the catalyst solution for the Chem-Ox injection should be monitored regularly. No flammable materials will be stored in the tent.
- MWH will coordinate attendance by personnel from the traffic control subcontractors at the Kickoff Meeting.

Future Meetings

- Chemical Oxidation Progress Meeting – Thursday, March 17, 2005, 10 a.m. at the Site
- General Site Meeting (incl. Chemical Oxidation Progress) – Thursday, April 7, 2005, 10 a.m. at the Site.

CAD/RAA/PJV/CAS

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**SITE MEETING AGENDA
MARCH 4, 2005
AMERICAN CHEMICAL SERVICE, NPL SITE
GRIFFITH, INDIANA**

**RECEIVED
MAR 04 2005
L.M. CAMPBELL**

MEETING DATE: Friday, March 4, 2005

MEETING TIME: 10:00

MEETING LOCATION: MWH Chicago Office

TOPICS:

SITE STATUS

- Health and Safety Summary
- GWTP Status
- ISVE Systems Status (incl. Thermal Oxidizers)
- Interaction with ACS Facility or Community

CURRENT ISSUES

- Lower Aquifer Groundwater Investigation
- Chem-Ox Application in South Area

MISCELLANEOUS

- Open

LOOK AHEAD

Field Events

- Groundwater sampling event - March 21
- Second full-scale chem-ox application - March 14 through mid-April
- ISVE Monitoring – March 9 (tentative)

Reports

- Monthly Status Report – March 9
- Quarterly Report, 4th Quarter 2004 – March 31
- Quarterly Report, 2nd Quarter 2004 – Agency approval received; final version issued by March 11
- HASP Update – March
- SBPA ISVE System Upgrades Design – March 25
- SBPA Cover CCR – Comments received; RTCs will be submitted on March 18
- ISVE Systems O&M Manual – Comments received; final version issued by March 25

Health & Safety Look Ahead

- Open

CAD/RAA

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Remedial Progress Report	February 2005	Report Date: 2/28/2005
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GWTP & Dewatering

The GWTP was operational for 28 days out of 28 days (100%).
Total Gallons treated = 1,103,477 gallons since 1/21/05 (35 days).

Ave. Flow Rate (gpm)	
11/18/04	20
12/3/04	27
12/10/04	20
12/30/04	25
1/21/05	30
2/25/05	27

Tables, Graphs & Figures

Table - Compliance Data

Graphs - Off-Site Dewatering

Graphs - SBPA Dewatering

SBPA ISVE System

System was operational 26 out of 28 days (93%).
System monitoring was conducted on 2/11/05.
The next monitoring event is scheduled for 3/9/05.

Tables, Graphs & Figures

Graph - Mass Extraction

Graph - Total VOC removal

Product Removal (2/24/05)	
SVE-52	1 gal
SVE-53	8 gal
SVE-62	1 gal
SVE-72	2 gal
SVE-88	3 gal

Active Wells (22 of 46 total)	
SVE-43	SVE-69
SVE-45	SVE-70
SVE-47	SVE-74
SVE-48	SVE-75
SVE-55	SVE-76
SVE-56	SVE-83
SVE-57	SVE-85
SVE-58	SVE-86
SVE-59	SVE-87
SVE-63	AS-3
SVE-64	AS-4
SVE-67	AS-5
SVE-68	AS-6

Off-Site ISVE System 28 25

System was operational 31 out of 31 days (100%).
System monitoring was conducted on 2/11/05.
The next monitoring event is scheduled for 3/9/05.
Ambient Air Valve Position = Closed.

Tables, Graphs & Figures

Graph - Mass Extraction

Graph - Total VOC removal

Active Wells (25 of 42 total)	
SVE-01	SVE-26
SVE-04	SVE-27
SVE-05	SVE-29
SVE-07	SVE-30
SVE-08	SVE-31
SVE-09	SVE-33
SVE-11	SVE-36
SVE-15	SVE-37
SVE-16	SVE-38
SVE-19	SVE-39
SVE-20	SVE-41
SVE-21	AS-7
SVE-23	AS-8
SVE-25	AS-9

Comments

Data presented here is for informational purposes only. Not all data presented in this report has been validated.

Table
Summary of Effluent Analytical Results
Groundwater Treatment System
American Chemical Service NPL Site
Griffith, Indiana

Event Date	Month 91 12/15/2004	Month 92 1/19/2005	Month 93 2/15/2005	Effluent Limits	Lab Reporting Limits
pH	7.32 /J	7.43	7.06	6-9	none
TSS	NS	1.87	NS	30	10
BOD	NS	< 2	NS	30	2
Arsenic	NS	7.0 B	NS	50	3.4
Beryllium	NS	ND	NS	NE	0.2
Cadmium	NS	ND	NS	4.1	0.3
Manganese	NS	1.9 B	NS	NE	10
Mercury	NS	ND	NS	0.02 (w/DL = 0.64)	0.64
Selenium	NS	ND	NS	8.2	4.3
Thallium	NS	ND	NS	NE	5.7
Zinc	NS	ND	NS	411	1.2
Benzene	ND	0.14 J	0.14 J	5	0.5
Acetone	1.5 JB/ 2.5 UB	1.0 JB	2.4 J	6,800	3
2-Butanone	4.1	ND	ND	210	3
Chloromethane	ND	ND	ND	NE	0.5
1,4-Dichlorobenzene	ND	ND	ND	NE	0.5
1,1-Dichloroethane	ND	ND	ND	NE	0.5
cis-1,2-Dichloroethene	ND	0.71	0.57	70	0.5
Ethylbenzene	ND	ND	0.14 J	34	0.5
Methylene chloride	0.98	1.8	1.0	5	0.6
Tetrachloroethene	ND	0.17 J	0.16 J	5	0.5
Trichloroethene	ND	ND	0.12 JB	5	0.5
Vinyl chloride	ND	ND	0.22 J	2	0.5
4-Methyl-2-pentanone	ND	ND	ND	15	3
bis (2-Chloroethyl) ether	NS	ND	NS	9.6	9.6
bis(2-Ethylhexyl) - phthalate	NS	ND	NS	6	6
4 - Methylphenol	NS	ND	NS	34	10
Isophorone	NS	ND	NS	50	10
Pentachlorophenol	NS	ND	NS	1	1
PCB/Aroclor-1016	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1221	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.92*
PCB/Aroclor-1232	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1242	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1248	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1254	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1260	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5

Notes:

Bolded result indicates a exceedence of the discharge limit
pH data is expressed in S.U.

Metals, VOC, SVOC and PCB data is expressed in ug/L.

ND = Not detected

NS = This analyte was not sampled or analyzed for

NE = No effluent limit established.

DL = Detection limit

* = Approved SW-846 method is incapable of achieving effluent limit.

DRAFT VERSION

For Informational Purposes Only

Not all data presented here has been validated.
Notes and suffix definitions have not been updated.

Suffix Definitions:

/J = Data qualifier added by laboratory

/_ = Data qualifier added by data validator

J = Result is estimated

B = Compound is also detected in the blank

UJ = Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value

JB = Result is detected below the reporting limit and is an estimated concentration.

The compound is also detected in the method blank resulting in a potential high bias

UB = Compound or analyte is not detected at or above the indicated concentration due to blank contamination

UBJ = Analyte is not detected at or above the indicated concentration due to blank contamination, however the calibration was out of range. Therefore the concentration is estimated.

Figure 4
OFCA Miscellaneous Wells
Groundwater Level Status
ACS NPL Site
Griffith, Indiana

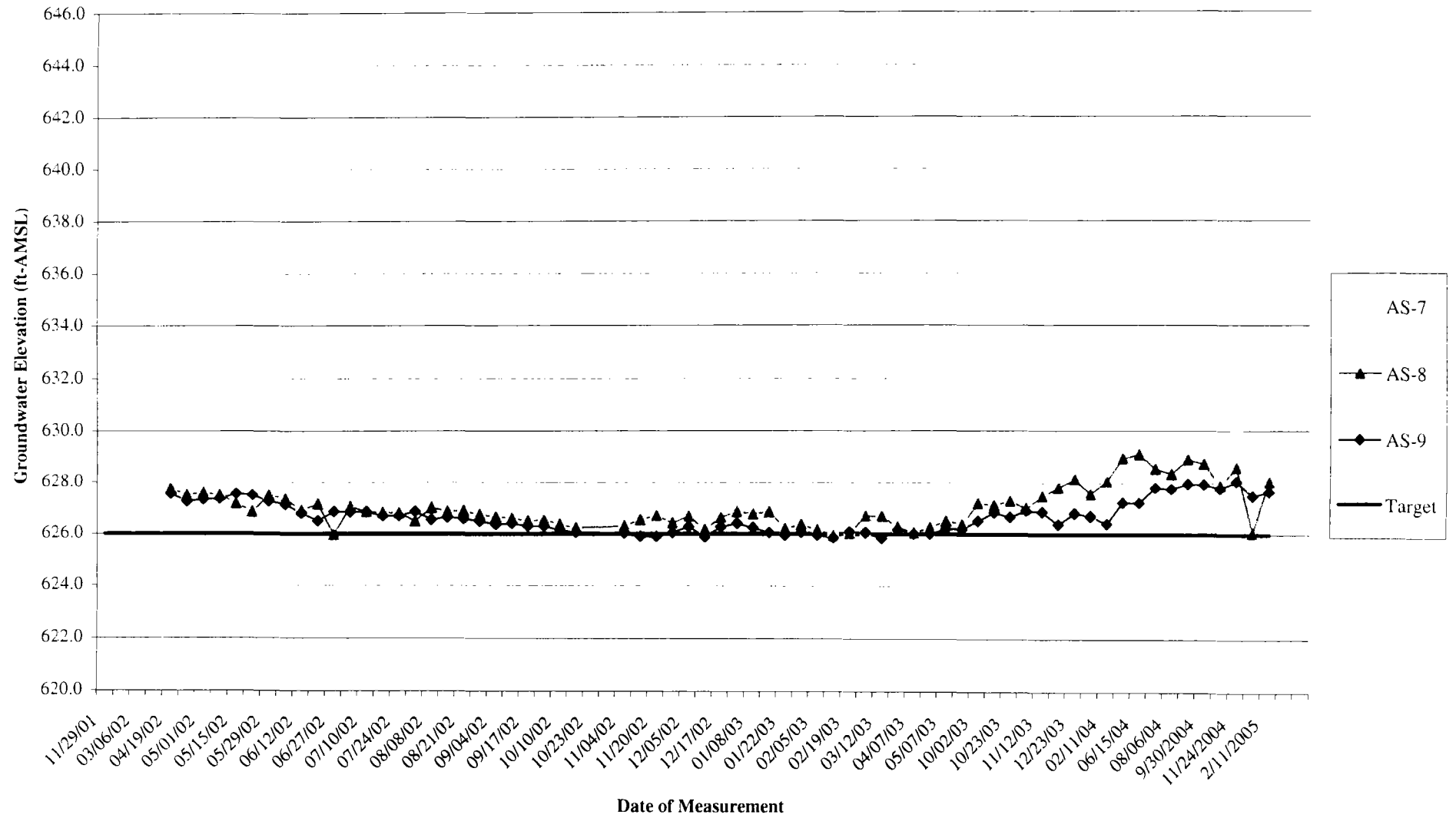
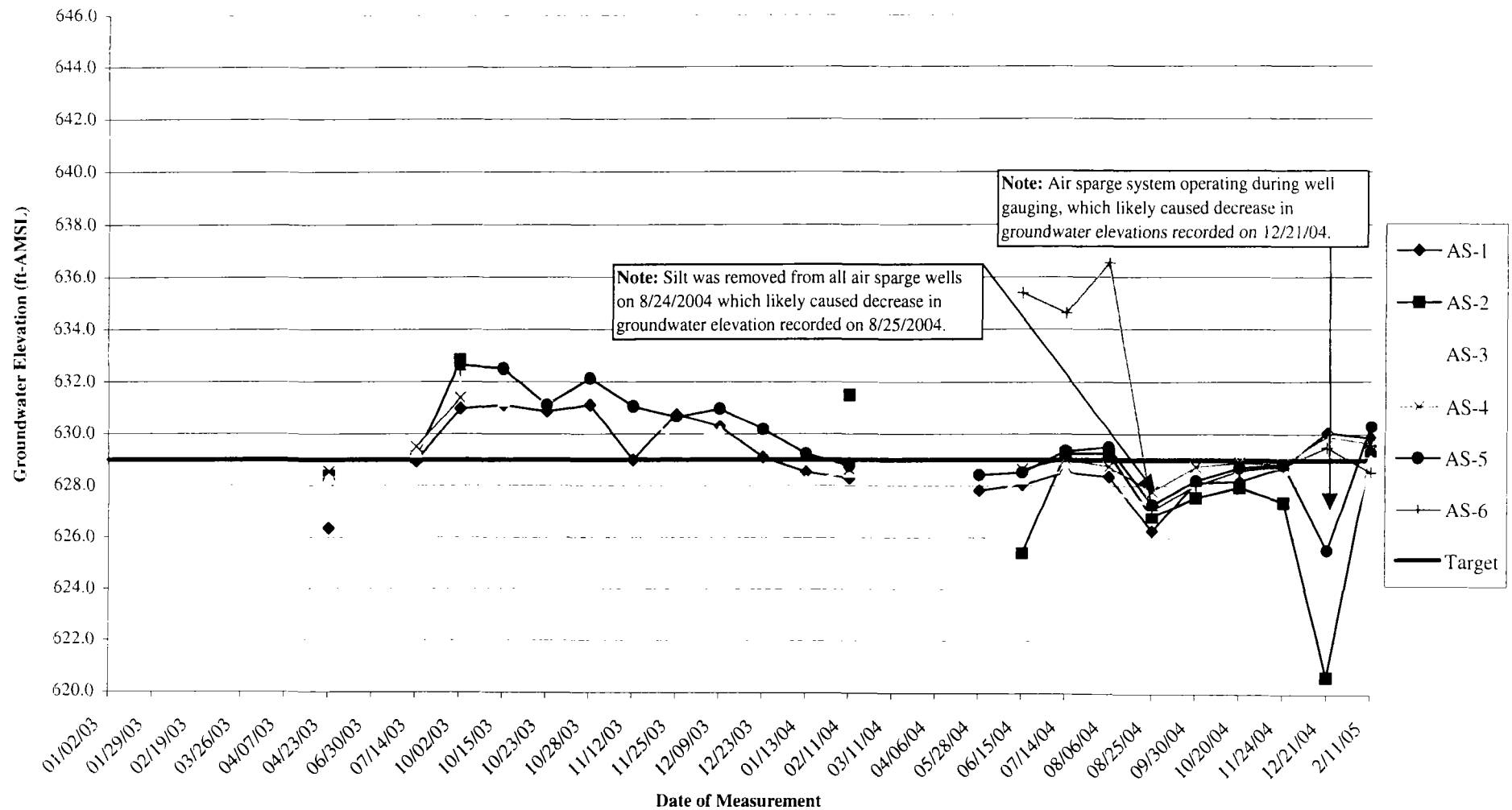
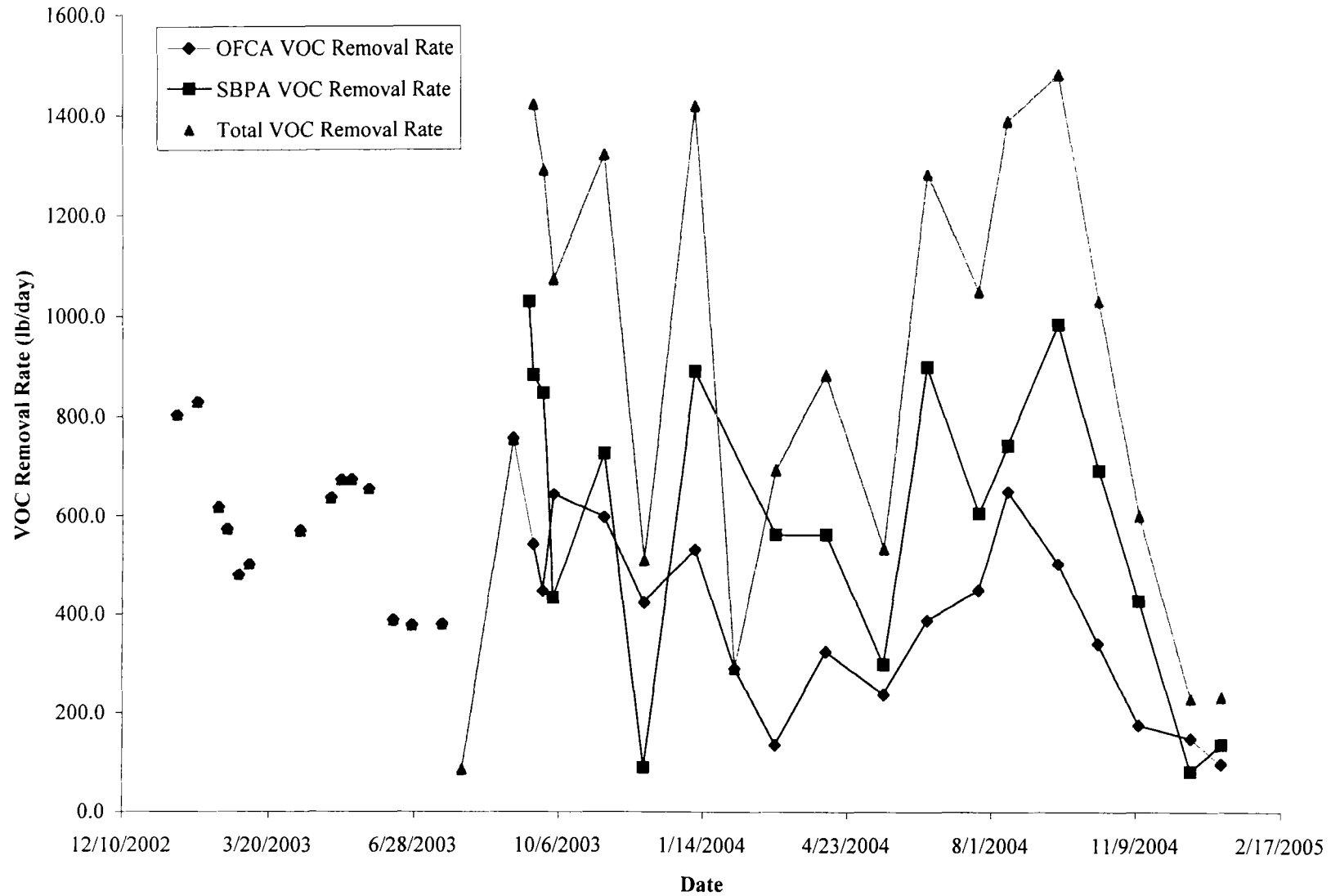


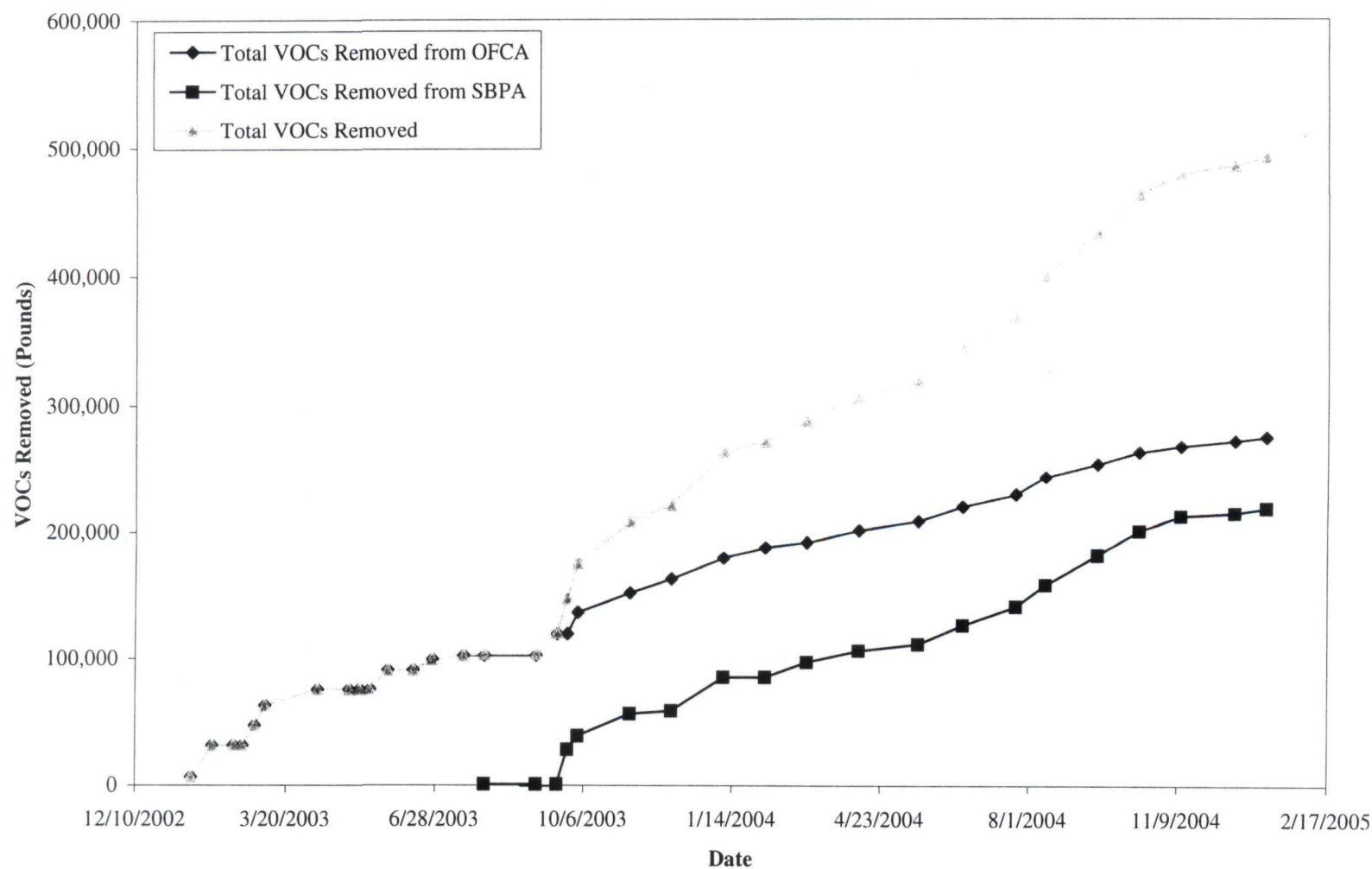
Figure 2
SBPA Miscellaneous Wells
Groundwater Level Status
ACS NPL Site
Griffith, Indiana



VOC Removal Rate
American Chemical Services NPL Site, Griffith, IN



Total VOCs Removed **American Chemical Services NPL Site, Griffith, IN**



24 Feb 05

1110 Arrive on site - Overcast
Cold 36°F

Personnel on site

Lee Cross MWH

Tim Kirkland Mustang

Larry Campbell BWSR

1125 Photo 71-15 Looking N at
SVE 62 showing equipment to
remove product from well

1127 Photo 71-16 Looking down at
pump being removed from SVE 62
showing black product

1135 Photo 71-17 Looking S at
new fencing around well field
near blower shed

1137 Photo 71-18 Looking S at
new fencing around well field
on E side

1140 MWH removed dedicated pump
from SVE 53 & used another pump
to remove product. Letting recharge
over lands

1200 Left site for day

L M Campbell

(126)

4 March 05

1000 Operation, Maintenance & Monitoring Meeting Notes

Met at MWH Chicago office

Attendees:

- Rob Adams, Matt Mesarch,
- Chris Daly, Pete Vagt (parttime)
- Lee Orosz - Site - Phone
- Chad Smith - Phone
- Larry Campbell - BVSPC

A Meeting agenda and the new Remedial Progress Report had been sent to attendees previously & were basis of discussion & summary of data.

IT&S - No issues since last mtg.

Out Austgen personnel have been working onsite. w/ general maintenance and PC programming.

- Lee had invited Griffith Chief of Fire Dept to Site for briefing & orientation to MWH ops onsite.
- on 3/4/05. Provide him complete

Jim Campbell

(127)

Set of MSDS from plant. Scheduled mtg at site of all voluntary fire dept. Staff on Mar. 22 @ 6 pm for similar briefing

- MWH has been coordinating w/ contractor re methods to lift ^{required} gearbox up on top of diesel tank.

GWTP - Operating at 27 gpm - NO problems.

Water level readings lately in OFCA are rising at PZ 116. May be having difficulty in extraction well/trenches EW12 & EW13.

ISVE

SBPA - Cleaned knockout tank & replaced demister & pump.

OFCA - Cleaned & replaced demister in KO tank

Mass removal rates of both units have deteriorated significantly lately. May need to add more wells

SBPA - MWH removed 15 gal product from S SVE wells

MWH has scheduled for Global Technologies to inspect ~~SBPA~~ ~~SBPA~~ ~~SBPA~~

Jim Campbell

(128)

Thermax 2 week of April 25
 - SBPA air sparge still
 operating w/ on 4 ALS points - not
 two near break room. ACS
 not reported any more vapors.

NOISE ABATEMENT

Flitway Technologies was
 on site 3/3 to take measurements
 for noise baffle / housing
 around blowers.

ACS Mods. ACS is making
 construction modifications in
 order to handle new products
 MWt to determine if new
 process has any impact on
 MWt operations

Lower Aquifer - Rept to be
 submitted on 3/25

Chemox

Scheduled to start 3/14
 w/ PSA mobilize on 3/15
 will hold KO & H₂S mty on 3/15
 ISOTEC will use heated tent to
 keep catalyst in solution - safety
 issues

JM Campbell

(129)

Traffic Control Plan had been
 submitted to town of Gr. Hts on 2/28
 MWt distributed notice to nearby
 residents & businesses re closing
 of Colfax lanes for Chemox injections.

Soil Vapor Sampling

Ad'l Sampling conducted on
 3/1 & 3/2

Look Ahead

- SUE Monitoring 3/9
- Chemox 3/14 → April
- GW Sampling 3/21 - 3/29
- Griffith Fire Dept - 3/22

Look Ahead H₂S

- Chemox KO & H₂S mty 3/15
- Lifting of gearbox on bio tank
- heater for Chemox

Next Mty

- Mar 17 at site & weekly
 during Chemox (mid April)
 - OMM - May 6
- Mty over 1105

Left in Day
 JM Campbell



Site: American Chemical Service, Inc.
 Proj. #: 46526
 Roll: 71 Photo #15
 Date: 2-24-05 Time: 1125
 Photographer: Larry Campbell
 Description: Photo facing north at SVE62 showing
 equipment to remove product from well.



Site: American Chemical Service, Inc.
 Proj. #: 46526
 Roll: 71 Photo #16
 Date: 2-24-05 Time: 1127
 Photographer: Larry Campbell
 Description: Photo facing down at pump being removed
 from SVE62 showing black product on
 pump and tubing.



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 71 Photo #17

Date: 2-24-05 Time: 1135

Photographer: Larry Campbell

Description: Photo facing south showing new yellow fencing installed around SVE well field near SBPA blower shed.



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 71 Photo #18

Date: 2-24-05 Time: 1140

Photographer: Larry Campbell

Description: Photo facing south showing new fencing around SVE well field on east side of SBPA.